

Amendments to the Claims

This list of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A switch fabric network for routing packets, wherein each of said packets comprise packet field data, comprising: a switch having a plurality of ports, wherein said switch ~~is adapted to receive~~ receives a packet on one of said plurality of ports, and based solely on said packet field data and the number of said ports, ~~is adapted to transmit~~ transmits said packet on a second one of said plurality of ports.

Claim 2 (currently amended): A system of claim 1 wherein said packet field data comprises a turn pool, wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of said second port relative to said first port.

Claim 3 (cancelled)

Claim 4 (previously amended): A system of claim 1 wherein said packet field data is comprised of a credit length, a bit count, a turn pool, an operation, a Path Identifier (PID) index, a Maximum Transmission Unit (MTU) and an Extended Unique Identifier (EUI).

Claims 5-12 (cancelled)

Claim 13 (previously presented): The system of claim 2 wherein said packet field data further comprises a bit count.

Claim 14 (currently amended): A switch for routing a packet, wherein said packet comprises packet field data, comprising:

a plurality of ports;

means for receiving said packet on ~~one~~ a first of said ports;

means for determining the appropriate port on which to transmit said received packet, using only said packet field data and the number of said ports; and

means for transmitting said packet on said determined appropriate port.

Claim 15 (currently amended): The switch of claim 14, wherein said packet field data comprises a turn pool, wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of said determined appropriate port relative to said first port; and said determining means utilizes said turn pool to select said appropriate port.

Claim 16 (previously presented): The switch of claim 15, wherein said packet field data further comprises a bit count and said determining means utilizes said bit count to select said appropriate port.

Claim 17 (previously presented): The switch of claim 14, further comprising means to modify said packet field data prior to transmitting said packet.

Claim 18 (currently amended): A method of routing a packet from a source to a destination within a fabric having at least one switch, said switch having a plurality of ports, said method comprising:

- encapsulating said packet with a header, wherein said header comprising packet field data;
- transmitting said encapsulated packet from said source to said switch;
- receiving said encapsulated packet by said switch on ~~one~~ a first of said ports;
- determining an appropriate output port using only said packet field data and the number of said ports; and
- transmitting said encapsulated packet from said switch via said appropriate output port.

Claim 19 (previously presented): The method of claim 18 further comprising modifying said packet field data prior to transmitting via said appropriate output port.

Claim 20 (currently amended): The method of claim 18 whereby said packet field data comprises a turn pool, wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of said appropriate output port relative to said first port.

Claim 21 (previously presented): The method of claim 20 whereby said packet field data further comprises a bit count.

Claim 22 (currently amended): The method of claim 19 whereby said packet field data comprises a turn pool,

wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of said appropriate output port relative to said first port.

Claim 23 (previously presented): The method of claim 22 whereby said packet field data further comprises a bit count.

Claim 24 (previously presented): The method of claim 18, wherein said fabric comprises a plurality of switches, and said method further comprises repeating said receiving, determining and transmitting steps until said packet reaches said destination.

Claim 25 (previously presented): The method of claim 21, further comprising using said turn pool and bit count of said packet received by said destination to create a second header, used by said destination, to encapsulate a second packet to be routed from said destination to said source.

Claim 26 (previously presented): The method of claim 23, further comprising using said turn pool and bit count of said packet received by said destination to create a second header, used by said destination, to encapsulate a second packet to be routed from said destination to said source.